

Title (en)

METHODS FOR ULTRASOUND ELASTOGRAPHY WITH CONTINUOUS TRANSDUCER VIBRATION

Title (de)

VERFAHREN FÜR ULTRASCHALL-ELASTOGRAFIE MIT KONTINUIERLICHER WANDLERVIBRATION

Title (fr)

PROCÉDÉS POUR ÉLASTOGRAPHIE À ULTRASON À VIBRATION DE TRANSDUCTEUR CONTINUE

Publication

**EP 3359047 B1 20210714 (EN)**

Application

**EP 16854283 A 20161006**

Priority

- US 201562238891 P 20151008
- US 2016055649 W 20161006

Abstract (en)

[origin: WO2017062553A1] Systems and methods for processing data acquired using ultrasound elastography, in which shear waves are generated in a subject using continuous vibration of an ultrasound transducer, are provided. The systems and methods described here can effectively remove motion artifacts associated with vibration of the ultrasound transducer, and can also remove the data sampling misalignment caused when a line-by-line imaging mode is used to acquire data, as is done by many conventional ultrasound scanners. Thus, the systems and methods described here provide techniques for transducer motion correction and for aligning motion signals detected by line-by-line scanning ultrasound systems.

IPC 8 full level

**A61B 8/00** (2006.01); **A61B 5/00** (2006.01); **A61B 8/08** (2006.01)

CPC (source: CN EP US)

**A61B 5/0051** (2013.01 - CN EP US); **A61B 8/4254** (2013.01 - CN US); **A61B 8/485** (2013.01 - CN EP US); **A61B 8/5207** (2013.01 - CN EP US); **A61B 8/5223** (2013.01 - CN US); **A61B 8/5276** (2013.01 - CN EP US); **G01S 7/52042** (2013.01 - CN EP US); **G01S 7/52079** (2013.01 - CN EP US); **G01S 15/8915** (2013.01 - CN EP US); **A61B 5/0053** (2013.01 - CN EP US)

Citation (examination)

HANI ESKANDARI ET AL: "Identifying malignant and benign breast lesions using vibroelastography", 2013 IEEE INTERNATIONAL ULTRASONICS SYMPOSIUM (IUS), 1 July 2013 (2013-07-01), pages 25 - 28, XP055760464, ISBN: 978-1-4673-5684-8, DOI: 10.1109/ULTSYM.2013.0007

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2017062553 A1 20170413**; CN 108135568 A 20180608; CN 108135568 B 20211126; CN 113812979 A 20211221; EP 3359047 A1 20180815; EP 3359047 A4 20191009; EP 3359047 B1 20210714; US 12023199 B2 20240702; US 2018296191 A1 20181018

DOCDB simple family (application)

**US 2016055649 W 20161006**; CN 201680058937 A 20161006; CN 202111304608 A 20161006; EP 16854283 A 20161006; US 201615766327 A 20161006